

What is claimed is:

1. An aluminum alloy fin material for heat exchangers which has a thickness of 80 μm or less and is incorporated into a heat exchanger made of an aluminum alloy manufactured by brazing through an Al-Si alloy filler metal, wherein the structure of the fin material before brazing is a fiber structure, and the crystal grain diameter of the structure of the fin material after brazing is 50-250 μm .

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2. An aluminum alloy fin material for heat exchangers comprising the fin material as defined in claim 1 as a core material, and an Al-Si alloy filler metal clad on both sides of the core material.

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3. The aluminum alloy fin material for heat exchangers as defined in claim 1, wherein the Si concentration in an Si dissolution area in a brazed section at the center of the thickness of the fin material after brazing is 0.7% (mass%, hereinafter the same) or less.

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4. The aluminum alloy fin material for heat exchangers as defined in claim 2, wherein the Si concentration in an Si dissolution area in a brazed section on the surface of the fin material and at the center of the thickness of the fin material after brazing is 0.8% or more and 0.7% or less, respectively.

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5. The aluminum alloy fin material for heat exchangers as defined in any of claims 1 to 4, wherein the fin material is made of an aluminum alloy which comprises 0.8-2.0% (mass%, hereinafter the same) of Mn, 0.05-0.8% of Fe, 1.5% or less (excluding 0%, hereinafter the same) of Si, 0.2% or less of Cu, and 0.5-4% of Zn, with the balance being Al and impurities.

6. The aluminum alloy fin material for heat exchangers as defined in claim 2 or 4, wherein the fin material is made of an aluminum alloy which comprises 0.8-2.0% of Mn, 0.05-0.8% of Fe, 1.5% or less of Si, and 0.5-4% of Zn with the balance being Al and impurities, and the filler metal is made of an aluminum alloy which comprises 6-13% of Si with the balance being Al and impurities, the filler metal being clad on each side of the core material respectively at a thickness of 3-20% of the total thickness of the fin material and the filler metal.

7. The aluminum alloy fin material for heat exchangers as defined in claim 5, wherein the Cu content in the fin material is 0.03% or less.

8. The aluminum alloy fin material for heat exchangers as defined in claim 6, wherein the core material comprises 0.03% or less of Cu, and the filler metal comprises 0.1% or less of Cu.

9. The aluminum alloy fin material for heat exchangers as

defined in claim 5 or 7, wherein the fin material further comprises at least one of 0.05-0.3% of Zr and 0.05-0.3% of Cr.

10. The aluminum alloy fin material for heat exchangers
5 as defined in claim 6 or 8, wherein the core material further comprises at least one of 0.05-0.3% of Zr and 0.05-0.3% of Cr.

11. The aluminum alloy fin material for heat exchangers
as defined in any of claims 6, 8, and 10, wherein the filler
10 metal further comprises 0.5-6% of Zr.

12. A heat exchanger comprising the aluminum alloy fin material as defined in any of claims 1 to 11 which is joined by brazing.

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